Drop mixture in a thin layer over the specimens on the cover glass; heat through the flame. The alcohol ignites and is permitted to burn off, after which the specimen is washed in water and dried. The entire process takes 20-25 seconds, and the stain remains serviceable for any length of time. Polar bodies appear deep blue and the bacilli bright red. Even in smears with a preponderance of other bacteria, individual diphtheria bacilli may be readily and unmistakably identified.

A NEW TECHNIC IN STAINING DIPHTHERIA SPECIMENS WITH TOLUIDIN BLUE

Dr. Constant Ponder (Lancet, July 6, 1912; Abstr. U. S. Naval Med. Bull. Oct. 1912, p. 612) recommends the following treatment for diphtheria bacilli:—

The stain:

Toluidin blue (Grübler)	0.02 gram.
Glacial acetic acid	1 cc.
Abs. Alc.	2 "
Distilled Water to make	100 "

The film made on cover glass is fixed as usual. Spread stain on film. The cover glass is then turned over and mounted as a hang-drop preparation. Typical diphtheria bacilli are said to stain blue, with red granules. The author gives this as a new method, and says it is preferable to either Methylene blue or Neisser's stain.

NOTES FROM MEETING OF THE ILLINOIS MICROSCOPICAL SOCIETY, *Chicago, Oct. 10, 1912*

Mr. N. S. Amstutz showed a useful contrivance for keeping pond life in place. It consisted of a piece of brass about 7/8 in. square and 5/32 in. thick. A series of seven holes were drilled thru it so as to imprison that many varieties of pond life at one time. The plate was placed in a flat bottomed watch glass and each specimen transferred with a pipette to its proper "cell." These could be then studied at will very nicely with a 2/3 objective and various combinations of oculars. The specimens were confined laterally so they were unable to move out of the field of view though having abundant room for vertical movement. With the coarse ad-

justment the up and down variation could easily be followed. It proved a great satisfaction to examine water fleas, mosquito larvae, etc., when fenced in. The holes were arranged 6 in a circle of 1/2 in. diameter and the seventh in the center. Their diameter was determined by measuring the diameter of the field with a stage micrometer and then selecting the next smaller size of twist drill by which to do the drilling. To guard against the smallest animalculæ creeping between the brass and the watch glass the bottom face could be covered with a thin film of balsam, air dried until quite of proper consistency, and then a cover glass pressed into intimate contact, so that no balsam would run into the spaces.

VIDA A. LATHAM, Secy.

BOG SOLUTIONS AND PLANTS

Dachnowski (Bot. Gaz. Dec. 1912) writes on the physiological effects of peat or bog solutions on the plants subjected to them. It has been clearly established that the nature of these organic solutions and of the bacterial flora maintaining life therein is a very important factor in limiting the higher life of these regions. The fact that some plants tolerate these conditions and others do not makes clear a difference in the plants themselves. The writer is endeavoring to see what it is that makes this difference in plants exposed to the solutions. The responsibility must rest either upon difference in diosmotic qualities of the plasmic membranes, or upon differences in cytoplasmic resistence, or on both. He finds the following facts which help to localize the solution of the problem: (1) Some plants may cause the precipitation of the hurtful materials in the solutions in an insoluble form, by enzymic action. This conceivably may take place outside the membrane, inside the cell; or in the membrane itself, affecting its permeability; (2) other plants may possess the power of assimilating with impunity these organic substances.

It is well known that these solutions have little effect on certain xerophytic plants, while they totally inhibit agricultural plants. The value of the work is evident as bearing on the agricultural use of peat lands, on the nature of xeromorphy itself, as well as on the successions of vegetation in the bogs.